

WHAT IS CLAIMED IS

1. A mutant of a *Bacillus* strain which produces a factor which potentiates the pesticidal activity of a *Bacillus* related pesticide, wherein the amount of the factor produced by the mutant is greater than the amount of the factor produced by a corresponding parental strain, wherein said *Bacillus* strain is selected from the group consisting of *Bacillus licheniformis*, *Bacillus subtilus*, and *Bacillus thuringiensis*.

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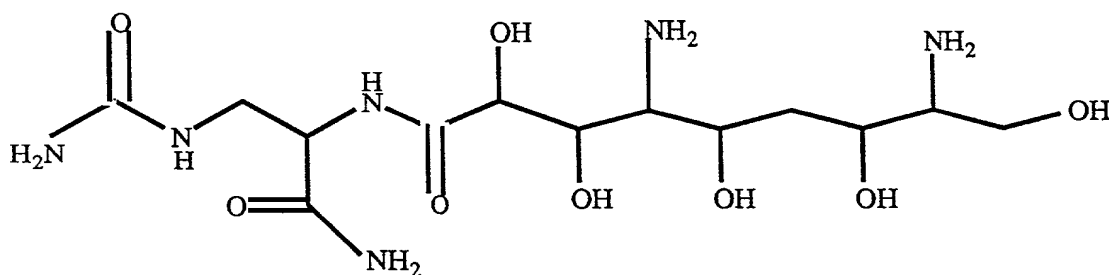
2. The mutant according to claim 1, wherein the mutant produces at least about 2 times more factor than the corresponding parental strain.

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3. The mutant according to claim 1, wherein the factor has ^1H NMR shifts at about δ 1.5, 3.22, 3.29, 3.35, 3.43, 3.58, 3.73, 3.98, 4.07, 4.15, 4.25, and 4.35, and ^{13}C shifts at about 31.6, 37.2, 51.1, 53.3, 54.0, 54.4, 61.5, 61.6, 64.1, 65.6, 158.3, 170.7, and 171.3.

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4. The mutant according to claim 1, wherein the factor has the structure I or salt thereof



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5. The mutant according to claim 1, wherein the *Bacillus* strain is a *Bacillus thuringiensis* strain.

6. The mutant according to claim 5, wherein the *Bacillus thuringiensis* strain is selected from the group consisting of strains of *Bacillus thuringiensis* subsp. *aizawai*, *Bacillus thuringiensis* subsp. *alesti*, *Bacillus thuringiensis* subsp. *canadiensis*, *Bacillus thuringiensis* subsp. *colmeri*, *Bacillus thuringiensis* subsp. *coreanensis*, *Bacillus thuringiensis* subsp. *dakota*, *Bacillus thuringiensis* subsp. *darmstadiensis*, *Bacillus thuringiensis* subsp. *dendrolimus*, *Bacillus thuringiensis* subsp. *entomocidus*, *Bacillus thuringiensis* subsp. *finitimus*, *Bacillus thuringiensis* subsp. *galleriae*, *Bacillus thuringiensis* subsp. *indiana*, *Bacillus thuringiensis* subsp. *israelensis*, *Bacillus thuringiensis* subsp. *kenyae*, *Bacillus thuringiensis* subsp. *kumamotoensis*, *Bacillus thuringiensis* subsp. *kurstaki*, *Bacillus thuringiensis* subsp. *kyushuensis*, *Bacillus thuringiensis* subsp. *japonensis*, *Bacillus thuringiensis* subsp. *mexcanensis*, *Bacillus thuringiensis* subsp. *morrisoni*, *Bacillus thuringiensis* subsp. *neoleonensis*, *Bacillus thuringiensis* subsp. *nigeriae*, *Bacillus thuringiensis* subsp. *ostrinae*, *Bacillus thuringiensis* subsp. *pakistani*, *Bacillus thuringiensis* subsp. *pondicheriensis*, *Bacillus thuringiensis* subsp. *shandongensis*, *Bacillus thuringiensis* subsp. *silo*, *Bacillus thuringiensis* subsp. *sotto*, *Bacillus thuringiensis* subsp. *subtoxicus*, *Bacillus thuringiensis* subsp. *tenebrionis*, *Bacillus thuringiensis* subsp. *thompsoni*, *Bacillus thuringiensis* subsp. *tochigiensis*, *Bacillus thuringiensis* subsp. *tohokuensis*, *Bacillus thuringiensis* subsp. *tolworthi*, *Bacillus thuringiensis* subsp. *toumanoffi*, *Bacillus thuringiensis* subsp. *wuhanensis*, and *Bacillus thuringiensis* subsp. *yunnanensis*.

7. The mutant according to claim 5, wherein the *Bacillus thuringiensis* strain is a *Bacillus thuringiensis* subsp. *kurstaki* strain.

8. The mutant according to claim 1, wherein the mutant has the identifying characteristics of EMCC0129, deposited with the NRRL, having an accession number of NRRL B-
www; or has the identifying characteristics of EMCC0130,

deposited with the NRRL, having an accession number of NRRL B-xxxx.

9. The mutant according to claim 1, wherein the
5 *Bacillus* related pesticide comprises a *Bacillus thuringiensis* delta-endotoxin or a pesticidally-active fragment thereof.

10. The mutant according to claim 9, wherein the
10 *Bacillus thuringiensis* delta-endotoxin or the pesticidally-active fragment thereof is selected from the group consisting of CryI, CryII, CryIII, CryIV, CryV, and CryVI.

11. The mutant according to claim 10, wherein the
15 *Bacillus thuringiensis* delta-endotoxin or the pesticidally-active fragment thereof is a CryIA delta-endotoxin or a pesticidally-active fragment thereof.

12. The mutant according to claim 10, wherein the
20 *Bacillus thuringiensis* delta-endotoxin or the pesticidally-active fragment thereof is a CryIC delta-endotoxin or a pesticidally-active fragment thereof.

13. The mutant according to claim 1, wherein the
25 *Bacillus* related pesticide comprises a *Bacillus thuringiensis* spore.

14. The mutant according to claim 1, wherein the factor is obtained by

- 30 (a) culturing the mutant of the *Bacillus* strain under suitable conditions;
(b) recovering a supernatant of the culture of the mutant of step (a); and
(c) isolating the factor from the supernatant of step (b).

35 15. The mutant according to claim 14, wherein the factor is obtained from the supernatant of the culture of a *Bacillus thuringiensis* strain.

16. A method for obtaining the mutant of claim 1
comprising

- (a) treating a *Bacillus* strain with a mutagen;
- 5 (b) growing the mutated *Bacillus* strain of step (a) under
suitable conditions for selecting the mutant; and
- (c) selecting the mutant of step (b).

17. A mutant of a *Bacillus* strain obtained according
10 to the method of claim 16.